AMENDMENTS TO THE CLAIMS

- 1. (Currently amended) A metal catalyst obtained by contacting
- (A) at least one metal or metal compound selected from
- i) tungsten compounds composed of tungsten and an element of group IIIb, IVb, Vb, or VIb,
- ii) molybdenum compounds composed of molybdenum and an element of group IIIb, IVb, Vb, or VIb, and
- iii) tungsten metal and molybdenum metal;
- (B) at least one compound selected from tertiary amine compounds, tertiary amine oxide compounds, nitrogen-containing aromatic compounds and nitrogen-containing aromatic N-oxide compounds;
- (C) hydrogen peroxide; and
- (D) a phosphate compound.
- 2. (Original) The metal catalyst according to claim 1, wherein the element of group IIIb is boron, the element of group IVb is carbon, the element of group Vb is phosphorus and the element of group VIb is oxygen or sulfur.
- 3. (Original) The metal catalyst according to claim 1, wherein the group (A) are consisting of tungsten metal, tungsten boride, tungsten carbide, tungsten silicide, tungsten nitride, tungsten phosphide, tungsten oxide, tungstic acid, sodium tungstate, tungsten sulfide, molybdenum metal, molybdenum boride, molybdenum carbide, molybdenum silicide,

Application No. 10/552,664 Amendment dated April 1, 2009 Reply to Office Action of January 12, 2009

molybdenum nitride, molybdenum phosphide, molybdenum oxide, molybdic acid and molybdenum sulfide.

- 4. (Original) The metal catalyst according to any one of claim 1 to 3, wherein the metal or metal compound selected from the group (A) is at least one metal or metal compound selected from tungsten metal, tungsten boride and molybdenum metal.
- 5. (Previously presented) The metal catalyst according to claim 1, wherein the metal selected from the group (A) is tungsten metal.
- 6. (Previously presented) The metal catalyst according to claim 1, wherein the phosphate compound is phosphoric acid, an alkali metal phosphate or an alkaline earth metal phosphate.

7. (Canceled)

8. (Previously presented) A process for producing a β -hydroxyhydroperoxide compound or a carbonyl compound, which comprises reacting an olefin with hydrogen peroxide in the pH range of 0 or more and less than 2 in the presence of the metal catalyst according to claim 1.

9. (Previously presented) A process for producing a carbonyl compound, which comprises reacting a primary or secondary alcohol with hydrogen peroxide in the presence of the metal catalyst according to claim 1.